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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,723	12/18/2001	Jeffrey Scott Hepburn	198-1276	2242

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 FORD GLOBAL TECHNOLOGIES, LLC.
 SUITE 600 - PARKLANE TOWERS EAST
 ONE PARKLANE BLVD.
 DEARBORN, MI 48126

EXAMINER

TRAN, BINH Q

ART UNIT PAPER NUMBER

3748

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/025,723

Applicant(s)

HEPBURN ET AL.

Examiner

BINH Q. TRAN

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 10-18 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-7, and 10-18 are rejected under 35 U.S.C. 102 (b) as being anticipated by Takaoka et al. (Takaoka) (Patent Number 6,393,834).

Regarding claims 1, 10-11, and 15, Takaoka discloses a system and method for controlling a temperature of an emission control device (e.g. 26) receiving exhaust gases from an engine (11), the device being coupled adjacent and downstream of an oxidation catalyst (23), said system comprising: a reductant valve (29) selectively supplying reductant to said exhaust gases responsive to a first signal; a throttle valve (13) controlling flow of said exhaust gases to said oxidation catalyst responsive to a second signal; and a controller (15) operably connected to said reductant valve and said throttle valve, said controller generating said first and second signals to control a mixture of

Art Unit: 3748

said exhaust gases and said reductant flowing into said oxidation catalyst to control a temperature of said emission control device (e.g. See col. 4, lines 1-67; col. 6, lines 7-67; col. 7, lines 1-65).

Regarding claims 2 and 16, Takaoka further discloses that the temperature is controlled while said mixture is rich of stoichiometry and NO_x is being removed from said emission control device (e.g. See col. 4, lines 1-67; col. 6, lines 7-67; col. 7, lines 1-65).

Regarding claims 3 and 17, Takaoka further discloses that the temperature is controlled while said mixture is rich of stoichiometry and SO_x is being removed from said emission control device (e.g. See col. 5, lines 4-62).

Regarding claims 4 and 18, Takaoka further discloses that the temperature is controlled while said mixture is lean of stoichiometry and said emission control device is oxidizing particulate matter (e.g. See col. 4, lines 1-67; col. 6, lines 7-67; col. 7, lines 1-65).

Regarding claim 5, Takaoka further discloses that the step of indicating when NO_x needs to be removed from said emission control device (e.g. See col. 4, lines 1-67; col. 6, lines 7-67; col. 7, lines 1-65).

Regarding claim 6, Takaoka further discloses that the step of indicating when SO_x needs to be removed from said emission control device (e.g. See col. 5, lines 4-62).

Regarding claim 7, Takaoka further discloses that the step of indicating when particulate matter needs to be removed from said emission control device (e.g. See col. 4, lines 1-67; col. 6, lines 7-67; col. 7, lines 1-65).

Regarding claim 12, Takaoka further discloses that the emission control device comprises a NO_x trap (e.g. See col. 3, lines 15-67).

Art Unit: 3748

Regarding claim 13, Takaoka further discloses that the emission control device comprises a combined NOx trap-particulate filter (e.g. See col. 3, lines 15-67).

Regarding claim 14, Takaoka further discloses that the a temperature sensor (28) generating a third signal indicative of a temperature in said oxidation catalyst, said third signal being received by said controller (e.g. See col. 3, lines 15-67).

Allowable Subject Matter

Claims 8-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of five patents:

Hirota et al. (Pat. No. 6233925), Hirota et al. (Pat. No. 5974791), Hanaoka et al. (Pat. No. 6397582), Hirota et al. (Pat. No. 6708486), and Nakatani et al. (Pat. No. 6834496) all discloses an exhaust gas purification for use with an internal combustion engine.

Art Unit: 3748

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT
February 07, 2005



Binh Q. Tran
Patent Examiner
Art Unit 3748